

Amendments to the Specification:

Please replace the paragraph beginning at page 9, line 18, with the following rewritten paragraph:

To provide for efficient context switching within a ManArray processor, a processor mode bit is provided in a control register such as a processor state register in a miscellaneous register file (MRF). This bit is identified as a context switch bit (CSB). Fig. 2 illustrates a functional view of a system 200 for implementing the present invention. An S/P-bit and CSB bit control logic unit 202 contains the CSB and override logic. The control logic unit 202 provides enable signals 204 and 206 to multiplexers 208 and 210, respectively, to select where the result data from the execution units 212 are to be written. The result data is selectably written either to the SP configurable register file 214 or to the PE configurable register file 216. The control logic unit 202 also provides a select signal 218 to a multiplexer 220 to control which block of registers 214 or 216 that execution units 212 read data from. It is noted that in Fig. 2, the execution units 212 in the ManArray iVLIW processor may advantageously comprise five heterogeneous execution units which correspond to the five execution units 131 in Fig. 1. Also, the buses, multiplexers, and select control signals shown in Fig. 2 are indicated with multiple lines since in the ManArray processor such as shown in Fig. 1 there are eight 32-bit read ports and four 32-bit write ports for each 16x32-bit portion of both of the reconfigurable register files and each requires separate selection and control depending upon the instruction in execution and the machine state.